

Access DB# 76691

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: ANDY KASHNIKOW Examiner #: 60484 Date: 9/30/02  
Art Unit: 3700 Phone Number 301-1139 Serial Number: 101032559  
Mail Box and Bldg/Room Location: CP2-2A01 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: \_\_\_\_\_

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

LIT SEARCH FOR U.S. PATENT  
No. 4,759,749  
PFI 11/16/02  
7726

BEST AVAILABLE COPY

\*\*\*\*\*  
STAFF USE ONLY

## Type of Search

## Vendors and cost where applicable

Searcher: <u>Solomon</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: <u>305-5932</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: <u>CP2, 2C08</u>	Structure (#) _____	<u>Questel/Orbit</u>
Date Searcher Picked Up: <u>9-30-02</u>	Bibliographic _____	Dr.Link _____
Date Completed: <u>9-30-02</u>	Litigation <u>✓</u>	<u>Lexis/Nexis</u>
Searcher Prep & Review Time: <u>8</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>4</u>	Other _____	Other (specify) _____

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

4759749

July 26, 1988

**Heater for physiological fluids**

REISSUE: Reissue Application filed Dec. 2, 1996 (O.G. Aug. 5, 1997) Ex. Gp.: 3306; Re. S.N. 08/758,853 Reissue Application filed Dec. 6, 1995 (O.G. Mar. 26, 1996) Ex. Gp.: 3306; Re. S.N. 08/571, 706 Reissue Application filed Nov. 3, 1993 (O.G. Mar. 21, 1995) Ex. Gp.: 3306; Re. S.N. 08/145, 099 Reissue Application filed Nov. 20, 1992 (O.G. Feb. 23, 1993) Ex. Gp.: 3306 Reissue Application filed Jul. 26, 1990 (O.G. Oct. 2, 1990) Ex. Gp.: 336, August 5, 1997; January 2, 2002 - Reissue Application filed Ex. Gp.: 3763; Re. S.N. 10/032,559 August 20, 2002

APPL-NO: 866910 ()

FILED-DATE: May 27, 1986

GRANTED-DATE: July 26, 1988

ENGLISH-ABST:

A self-contained portable unit for heating physiological fluids is disclosed. A heat exchanger is disposable to ensure sterility, and the heat exchanger is attached to a heating system by inserting it between opposed fluid connection elements. One of the fluid connection elements is movable to permit the heat exchanger to be installed and removed easily by inserting one end of the heat exchanger in one of the fluid connection units and moving the other fluid connection unit into contact with an opposite end of the heat exchanger. The heating fluid is heated by an electric heating element and is circulated by an electric pump.

(C) QUESTEL 1994  
QUESTEL.ORBIT (TM) 1998

Selected file: PLUSPAT

**\*\* SS 1: Results 1**

1 / 1 PLUSPAT - @QUESTEL-ORBIT - image  
PN - US4759749 A 19880726 [US4759749]  
TI - (A) Heater for physiological fluids  
PA - (A) LEVEL 1 TECHNOLOGIES INC (US)  
IN - (A) VERKAART WESLEY H (US)  
AP - US86691086 19860527 [1986US-0866910]  
PR - US86691086 19860527 [1986US-0866910]  
EC - A61M-005/44  
ICO - K61M-205/36L  
PCL - ORIGINAL (O) : 604113000; CROSS-REFERENCE (X) : 165067000  
165156000 422046000  
DT - Corresponding document  
CT - US1873590; US2432592; US2910981; US3064649; US3374066; US3643733;  
US3831672; US4066119; US4437513; US4475584; US4559999; US4562890;  
US4623333; US4678460  
STG - (A) United States patent  
AB - A self-contained portable unit for heating physiological fluids is  
disclosed. A heat exchanger is disposable to ensure sterility,  
and the heat exchanger is attached to a heating system by  
inserting it between opposed fluid connection elements. One of the  
fluid connection elements is movable to permit the heat exchanger  
to be installed and removed easily by inserting one end of the  
heat exchanger in one of the fluid connection units and moving the  
other fluid connection unit into contact with an opposite end of  
the heat exchanger. The heating fluid is heated by an electric  
heating element and is circulated by an electric pump.

1 / 1 LGST - @LEGSTAT  
PN - US 4759749 [US4759749]  
AP - US 866910/86 19860527 [1986US-0866910]  
DT - US-P  
ACT - 19860527 US/AE-A  
APPLICATION DATA (PATENT)  
US 866910/86 19860527 [1986US-0866910]

19860703 US/AS02  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
LEVEL 1 TECHNOLOGIES, INC., 29 ALDRIN ROAD, PLYMOUTH, MA., 02360 \*  
VERKAART, WESLEY H. : 19860527

19880726 US/A  
PATENT

19901002 US/RF  
REISSUE APPLICATION FILED  
900726

19930223 US/RF  
REISSUE APPLICATION FILED  
921120

19950321 US/RF  
REISSUE APPLICATION FILED  
931103

19960326 US/RF  
REISSUE APPLICATION FILED  
951206

19960522 US/AS01  
CHANGE OF NAME  
SIMS LEVEL 1, INC. 160 WEYMOUTH STREET ROCKLAND, MASSACHUSETTS  
02370 \* LEVEL 1 TECHNOLOGIES, INC. : 19951017

19970805 US/RF  
REISSUE APPLICATION FILED  
961202

20020820 US/RF  
REISSUE APPLICATION FILED  
20020102

UP - 2002-35

1 / 1 CRXX - @CLAIMS/RRX  
PN - 4,759,749 D 19880726 [US4759749]  
PA - LEVEL 1 TECH INC  
ACT - 19900726 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 19901002  
REISSUE REQUEST NUMBER: 07/558177  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 336

Reissue Patent Number:

19921120 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 19930223  
REISSUE REQUEST NUMBER: 07/979434  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3306

Reissue Patent Number:

19931103 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 19950321  
REISSUE REQUEST NUMBER: 08/145099  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3306

Reissue Patent Number:

19951206 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 19960326  
REISSUE REQUEST NUMBER: 08/571706  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3306

Reissue Patent Number:

19960522 REASSIGNED

CHANGE OF NAME

Assignor: LEVEL 1 TECHNOLOGIES, INC. DATE SIGNED: 10/17/1995

Assignee: SIMS LEVEL 1, INC. 160 WEYMOUTH STREET ROCKLAND  
MASSACHUSETTS 02370

Reel 007969/Frame 0136

Contact: DICKINSON, WRIGHT, MOON VAN DUSEN & ETAL CONRAD J. CLARK  
1901 L STREET, N.W., SUITE 800 WASHINGTON, D.C. 20036

19961202 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 19970805  
REISSUE REQUEST NUMBER: 08/758853  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3306

Reissue Patent Number:

20020102 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 20020820  
REISSUE REQUEST NUMBER: 10/032559  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3763

Reissue Patent Number:

20020123 REASSIGNED  
CHANGE OF NAME

Assignor: SIMS LEVEL 1, INC. DATE SIGNED: 07/01/2001

Assignee: LEVEL 1, INC. 160 WEYMOUTH STREET ROCKLAND MASSACHUSETTS  
02370

Reel 012495/Frame 0284

Contact: LAW OFFICES OF LOUIS WOO LOUIS WOO, ESQ. 1901 N. FORT  
MYER DRIVE SUITE 501 ARLINGTON, VA 22209

1 / 6 PAST - ©Thomson Derwent  
AN - 200234-001590  
PN - 4759749 A [US4759749]  
OG - 2002-08-20  
ACT - REISSUE APPLICATION FILED

2 / 6 PAST - ©Thomson Derwent  
AN - 199731-001428  
PN - 4759749 A [US4759749]  
OG - 1997-08-05  
ACT - REISSUE APPLICATION FILED

3 / 6 PAST - ©Thomson Derwent  
AN - 199613-000642  
PN - 4759749 A [US4759749]  
OG - 1996-03-26  
ACT - REISSUE APPLICATION FILED

4 / 6 PAST - ©Thomson Derwent  
AN - 199512-000689  
PN - 4759749 A [US4759749]  
OG - 1995-03-21  
ACT - REISSUE APPLICATION FILED

5 / 6 PAST - ©Thomson Derwent  
AN - 199307-001229  
PN - 4759749 A [US4759749]  
OG - 1993-02-23  
ACT - REISSUE APPLICATION FILED

6 / 6 PAST - ©Thomson Derwent  
AN - 199010-001495  
PN - 4759749 A [US4759749]  
OG - 1990-10-02  
ACT - REISSUE APPLICATION FILED

Selected file: INPADOC

**\*\* SS 1: Results 13**

1 / 13 INPADOC - ©INPADOC  
PN - AT 127350 E 19950915 [ATE127350]  
TI - UNABHAENGIGE, TRANSPORTIERBARE VORRICHTUNG ZUM HEIZEN VON  
PHYSIOLOGISCHEN FLUESSIGKEITEN.  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - AT 87850176/87-EP 19870526 [1987EP-0850176]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14

1 / 2 LEGALI - ©LEGSTAT  
PN - AT 127350 [ATE127350]  
DT - AT-R  
ACTE - 19950915 AT/REF-P  
CORRESPONDS TO EP-PATENT  
(EP 247989 19950906 [EP-247989])  
  
19960415 AT/UEP [+]  
PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION  
  
19961015 AT/EEFA  
CHANGE OF THE COMPANY NAME  
UP - 1996-43

2 / 2 LEGALI - ©LEGSTAT  
PN - EP 247989 [EP-247989]  
AP - EP 87850176/87 19870526 [1987EP-0850176]

DT - EP-P  
 ACTE - 19870526 EP/AE-A  
 EP-APPLICATION  
 EP 87850176/87 19870526 [1987EP-0850176]

19871202 EP/AK-A2 [+]  
 DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH  
 REPORT:  
 AT BE CH DE ES FR GB GR IT LI LU NL SE

19871202 EP/A2 [+]  
 PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

19901122 EP/AK-A3 [+]  
 DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:  
 AT BE CH DE ES FR GB GR IT LI LU NL SE

19901122 EP/A3 [+]  
 SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

19910626 EP/17P [+]  
 REQUEST FOR EXAMINATION FILED  
 910429

19920902 EP/17Q [+]  
 FIRST EXAMINATION REPORT  
 920721

19950906 EP/AK-B1 [+]  
 DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT  
 SPECIFICATION:  
 AT BE CH DE ES FR GB GR IT LI LU NL SE

19950906 EP/B1 [+]  
 PATENT SPECIFICATION

19950906 EP/REF-R [+]  
 IN AUSTRIA REGISTERED AS:  
 (AT 127350 19950915 [ATE127350])

19951012 EP/REF-P  
 CORRESPONDS TO:  
 (DE 3751504 19951012 [DE3751504])

19951116 EP/REG; ES/FG2A  
 ES: DEFINITIVE PROTECTION  
 2076932T3  
 <ES>

19951206 EP/ITF [+]  
 IT: TRANSLATION FOR A EP PATENT FILED  
 UFFICIO BREVETTI RICCARDI & C.

19951229 EP/REG; GR/FG4A [+]  
 GR: VALIDATION IN GREECE  
 3017835  
 <GR>

19960112 EP/ET [+]  
 FR: TRANSLATION FILED

19960731 EP/REG; CH/PFA  
 CH: NAME/FIRM CHANGED

LEVEL 1 TECHNOLOGIES, INC. -DANN IN- SIMS LEVEL 1, INC.  
<CH>

19960828 EP/26N [+]  
NO OPPOSITION FILED

19961001 EP/NLT1  
NL: MODIFICATIONS OF NAMES REGISTERED IN VIRTUE OF DOCUMENTS  
PRESENTED TO THE PATENT OFFICE PURSUANT TO ART. 16 A, PARAGRAPH  
1(d) OF THE PATEN  
SIMS LEVEL 1, INC.

19961201 EP/REG; ES/PC2A [+]  
ES: TRANSFER GRANTED  
SIMS LEVEL 1, INC  
<ES>

19970110 EP/REG; FR/CA  
FR: CHANGE OF ADDRESS  
<FR>

19970110 EP/REG; FR/CD  
FR: CHANGE OF NAME OF NOMINATION  
<FR>

20020101 EP/REG; GB/IF02 [+]  
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01  
<GB>

UP - 2002-17

2 / 13 INPADOC - @INPADOC  
PN - CA 1271796 A1 19900717 [CA1271796]  
TI - DEVICE FOR HEATING PHYSIOLOGICAL FLUIDS  
LA - ENG  
IN - VERKAART WESLEY H  
PA - LEVEL 1 TECHNOLOGIES INC  
AP - CA 537953/87-A 19870526 [1987CA-0537953]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14

3 / 13 INPADOC - @INPADOC  
PN - DE 3751504 C0 19951012 [DE3751504]  
TI - UNABHAENGIGE, TRANSPORTIERBARE VORRICHTUNG ZUM HEIZEN VON  
PHYSIOLOGISCHEN FLUESSIGKEITEN.  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - DE 3751504/87-A 19870526 [1987DE-3751504]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14

1 / 2 LEGALI - @LEGSTAT  
PN - DE 3751504 [DE3751504]  
DT - DE-P  
ACTE - 19951012 DE/REF-P  
CORRESPONDS TO  
(EP 247989 19951012 [EP-247989])

19960222 DE/8373  
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED  
AND HAS BEEN PUBLISHED



19961002 DE/8364 [+]  
NO OPPOSITION DURING TERM OF OPPOSITION

19970814 DE/8327  
CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER  
SIMS LEVEL 1, INC., ROCKLAND, MASS., US  
UP - 1997-33

2 / 2 LEGALI - ©LEGSTAT  
PN - EP 247989 [EP-247989]  
AP - EP 87850176/87 19870526 [1987EP-0850176]  
DT - EP-P  
ACTE - 19870526 EP/AE-A  
EP-APPLICATION  
EP 87850176/87 19870526 [1987EP-0850176]

19871202 EP/AK-A2 [+]  
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH  
REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19871202 EP/A2 [+]  
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

19901122 EP/AK-A3 [+]  
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19901122 EP/A3 [+]  
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

19910626 EP/17P [+]  
REQUEST FOR EXAMINATION FILED  
910429

19920902 EP/17Q [+]  
FIRST EXAMINATION REPORT  
920721

19950906 EP/AK-B1 [+]  
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT  
SPECIFICATION:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19950906 EP/B1 [+]  
PATENT SPECIFICATION

19950906 EP/REF-R [+]  
IN AUSTRIA REGISTERED AS:  
(AT 127350 19950915 [ATE127350])

19951012 EP/REF-P  
CORRESPONDS TO:  
(DE 3751504 19951012 [DE3751504])

19951116 EP/REG; ES/FG2A  
ES: DEFINITIVE PROTECTION  
2076932T3  
<ES>

19951206 EP/ITF [+]

IT: TRANSLATION FOR A EP PATENT FILED  
UFFICIO BREVETTI RICCARDI & C.

19951229 EP/REG; GR/FG4A [+]  
GR: VALIDATION IN GREECE  
3017835  
<GR>

19960112 EP/ET [+]  
FR: TRANSLATION FILED

19960731 EP/REG; CH/PFA  
CH: NAME/FIRM CHANGED  
LEVEL 1 TECHNOLOGIES, INC. -DANN IN- SIMS LEVEL 1, INC.  
<CH>

19960828 EP/26N [+]  
NO OPPOSITION FILED

19961001 EP/NLT1  
NL: MODIFICATIONS OF NAMES REGISTERED IN VIRTUE OF DOCUMENTS  
PRESENTED TO THE PATENT OFFICE PURSUANT TO ART. 16 A, PARAGRAPH  
1(d) OF THE PATEN  
SIMS LEVEL 1, INC.

19961201 EP/REG; ES/PC2A [+]  
ES: TRANSFER GRANTED  
SIMS LEVEL 1, INC  
<ES>

19970110 EP/REG; FR/CA  
FR: CHANGE OF ADDRESS  
<FR>

19970110 EP/REG; FR/CD  
FR: CHANGE OF NAME OF NOMINATION  
<FR>

20020101 EP/REG; GB/IF02 [+]  
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01  
<GB>

UP - 2002-17

4 / 13 INPADOC - @INPADOC  
PN - DE 3751504 T2 19960222 [DE3751504]  
TI - UNABHAENGIGE, TRANSPORTIERBARE VORRICHTUNG ZUM HEIZEN VON  
PHYSIOLOGISCHEN FLUESSIGKEITEN.  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - DE 3751504/87-A 19870526 [1987DE-3751504]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14

1 / 2 LEGALI - @LEGSTAT  
PN - DE 3751504 [DE3751504]  
DT - DE-P  
ACTE - 19951012 DE/REF-P  
CORRESPONDS TO  
(EP 247989 19951012 [EP-247989])

19960222 DE/8373

TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED  
AND HAS BEEN PUBLISHED

19961002 DE/8364 [+]  
NO OPPOSITION DURING TERM OF OPPOSITION

19970814 DE/8327  
CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER  
SIMS LEVEL 1, INC., ROCKLAND, MASS., US

UP - 1997-33

2 / 2 LEGALI - @LEGSTAT

PN - EP 247989 [EP-247989]  
AP - EP 87850176/87 19870526 [1987EP-0850176]  
DT - EP-P  
ACTE - 19870526 EP/AE-A  
EP-APPLICATION  
EP 87850176/87 19870526 [1987EP-0850176]

19871202 EP/AK-A2 [+]  
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH  
REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19871202 EP/A2 [+]  
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

19901122 EP/AK-A3 [+]  
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19901122 EP/A3 [+]  
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

19910626 EP/17P [+]  
REQUEST FOR EXAMINATION FILED  
910429

19920902 EP/17Q [+]  
FIRST EXAMINATION REPORT  
920721

19950906 EP/AK-B1 [+]  
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT  
SPECIFICATION:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19950906 EP/B1 [+]  
PATENT SPECIFICATION

19950906 EP/REF-R [+]  
IN AUSTRIA REGISTERED AS:  
(AT 127350 19950915 [ATE127350])

19951012 EP/REF-P  
CORRESPONDS TO:  
(DE 3751504 19951012 [DE3751504])

19951116 EP/REG; ES/FG2A  
ES: DEFINITIVE PROTECTION  
2076932T3  
<ES>

19951206 EP/ITF [+]  
IT: TRANSLATION FOR A EP PATENT FILED  
UFFICIO BREVETTI RICCARDI & C.

19951229 EP/REG; GR/FG4A [+]  
GR: VALIDATION IN GREECE  
3017835  
<GR>

19960112 EP/ET [+]  
FR: TRANSLATION FILED

19960731 EP/REG; CH/PFA  
CH: NAME/FIRM CHANGED  
LEVEL 1 TECHNOLOGIES, INC. -DANN IN- SIMS LEVEL 1, INC.  
<CH>

19960828 EP/26N [+]  
NO OPPOSITION FILED

19961001 EP/NLT1  
NL: MODIFICATIONS OF NAMES REGISTERED IN VIRTUE OF DOCUMENTS  
PRESENTED TO THE PATENT OFFICE PERSUANT TO ART. 16 A, PARAGRAPH  
1(d) OF THE PATEN  
SIMS LEVEL 1, INC.

19961201 EP/REG; ES/PC2A [+] .  
ES: TRANSFER GRANTED  
SIMS LEVEL 1, INC  
<ES>

19970110 EP/REG; FR/CA  
FR: CHANGE OF ADDRESS  
<FR>

19970110 EP/REG; FR/CD  
FR: CHANGE OF NAME OF NOMINATION  
<FR>

20020101 EP/REG; GB/IF02 [+]  
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01  
<GB>

UP - 2002-17

5 / 13 INPADOC - ©INPADOC

PN - EP 247989 A2 19871202 [EP-247989]  
TI - SELF-CONTAINED PORTABLE UNIT FOR HEATING PHYSIOLOGICAL FLUIDS  
LA - E; ENG  
IN - VERKAART WESLEY H  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - EP 87850176/87-A 19870526 [1987EP-0850176]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14  
DS - AT\* BE\* CH\* DE\* ES\* FR\* GB\* GR\* IT\* LI\* LU\* NL\* SE\*

1 / 3 LEGALI - ©LEGSTAT

PN - DE 3751504 [DE3751504]  
DT - DE-P  
ACTE - 19951012 DE/REF-P  
CORRESPONDS TO

(EP 247989 19951012 [EP-247989])

19960222 DE/8373  
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED  
AND HAS BEEN PUBLISHED

19961002 DE/8364 [+]  
NO OPPOSITION DURING TERM OF OPPOSITION

19970814 DE/8327  
CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER  
SIMS LEVEL 1, INC., ROCKLAND, MASS., US  
UP - 1997-33

2 / 3 LEGALI - @LEGSTAT  
PN - AT 127350 [ATE127350]  
DT - AT-R  
ACTE - 19950915 AT/REF-P  
CORRESPONDS TO EP-PATENT  
(EP 247989 19950906 [EP-247989])

19960415 AT/UEP [+]  
PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION

19961015 AT/EEFA  
CHANGE OF THE COMPANY NAME  
UP - 1996-43

3 / 3 LEGALI - @LEGSTAT  
PN - EP 247989 [EP-247989]  
AP - EP 87850176/87 19870526 [1987EP-0850176]  
DT - EP-P  
ACTE - 19870526 EP/AE-A  
EP-APPLICATION  
EP 87850176/87 19870526 [1987EP-0850176]

19871202 EP/AK-A2 [+]  
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH  
REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19871202 EP/A2 [+]  
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

19901122 EP/AK-A3 [+]  
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19901122 EP/A3 [+]  
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

19910626 EP/17P [+]  
REQUEST FOR EXAMINATION FILED  
910429

19920902 EP/17Q [+]  
FIRST EXAMINATION REPORT  
920721

19950906 EP/AK-B1 [+]  
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT

SPECIFICATION:

AT BE CH DE ES FR GB GR IT LI LU NL SE

19950906 EP/B1 [+]  
PATENT SPECIFICATION

19950906 EP/REF-R [+]  
IN AUSTRIA REGISTERED AS:  
(AT 127350 19950915 [ATE127350])

19951012 EP/REF-P  
CORRESPONDS TO:  
(DE 3751504 19951012 [DE3751504])

19951116 EP/REG; ES/FG2A  
ES: DEFINITIVE PROTECTION  
2076932T3  
<ES>

19951206 EP/ITF [+]  
IT: TRANSLATION FOR A EP PATENT FILED  
UFFICIO BREVETTI RICCARDI & C.

19951229 EP/REG; GR/FG4A [+]  
GR: VALIDATION IN GREECE  
3017835  
<GR>

19960112 EP/ET [+]  
FR: TRANSLATION FILED

19960731 EP/REG; CH/PFA  
CH: NAME/FIRM CHANGED  
LEVEL 1 TECHNOLOGIES, INC. -DANN IN- SIMS LEVEL 1, INC.  
<CH>

19960828 EP/26N [+]  
NO OPPOSITION FILED

19961001 EP/NLT1  
NL: MODIFICATIONS OF NAMES REGISTERED IN VIRTUE OF DOCUMENTS  
PRESENTED TO THE PATENT OFFICE PURSUANT TO ART. 16 A, PARAGRAPH  
1(d) OF THE PATEN  
SIMS LEVEL 1, INC.

19961201 EP/REG; ES/PC2A [+]  
ES: TRANSFER GRANTED  
SIMS LEVEL 1, INC  
<ES>

19970110 EP/REG; FR/CA  
FR: CHANGE OF ADDRESS  
<FR>

19970110 EP/REG; FR/CD  
FR: CHANGE OF NAME OF NOMINATION  
<FR>

20020101 EP/REG; GB/IF02 [+]  
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01  
<GB>

UP - 2002-17

6 / 13 INPADOC - @INPADOC

PN - EP 247989 A3 19901122 [EP-247989]  
TI - SELF-CONTAINED PORTABLE UNIT FOR HEATING PHYSIOLOGICAL FLUIDS  
LA - E; ENG  
IN - VERKAART WESLEY H  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - EP 87850176/87-A 19870526 [1987EP-0850176]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14  
DS - AT\* BE\* CH\* DE\* ES\* FR\* GB\* GR\* IT\* LI\* LU\* NL\* SE\*

1 / 3 LEGALI - @LEGSTAT

PN - DE 3751504 [DE3751504]  
DT - DE-P  
ACTE - 19951012 DE/REF-P  
CORRESPONDS TO  
(EP 247989 19951012 [EP-247989])

19960222 DE/8373  
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED  
AND HAS BEEN PUBLISHED

19961002 DE/8364 [+]  
NO OPPOSITION DURING TERM OF OPPOSITION

19970814 DE/8327  
CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER  
SIMS LEVEL 1, INC., ROCKLAND, MASS., US

UP - 1997-33

2 / 3 LEGALI - @LEGSTAT

PN - AT 127350 [ATE127350]  
DT - AT-R  
ACTE - 19950915 AT/REF-P  
CORRESPONDS TO EP-PATENT  
(EP 247989 19950906 [EP-247989])

19960415 AT/UEP [+]  
PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION

19961015 AT/EEFA  
CHANGE OF THE COMPANY NAME

UP - 1996-43

3 / 3 LEGALI - @LEGSTAT

PN - EP 247989 [EP-247989]  
AP - EP 87850176/87 19870526 [1987EP-0850176]  
DT - EP-P  
ACTE - 19870526 EP/AE-A  
EP-APPLICATION  
EP 87850176/87 19870526 [1987EP-0850176]

19871202 EP/AK-A2 [+]  
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH  
REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19871202 EP/A2 [+]  
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

19901122 EP/AK-A3 [+]  
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19901122 EP/A3 [+]  
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

19910626 EP/17P [+]  
REQUEST FOR EXAMINATION FILED  
910429

19920902 EP/17Q [+]  
FIRST EXAMINATION REPORT  
920721

19950906 EP/AK-B1 [+]  
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT  
SPECIFICATION:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19950906 EP/B1 [+]  
PATENT SPECIFICATION

19950906 EP/REF-R [+]  
IN AUSTRIA REGISTERED AS:  
(AT 127350 19950915 [ATE127350])

19951012 EP/REF-P  
CORRESPONDS TO:  
(DE 3751504 19951012 [DE3751504])

19951116 EP/REG; ES/FG2A  
ES: DEFINITIVE PROTECTION  
2076932T3  
<ES>

19951206 EP/ITF [+]  
IT: TRANSLATION FOR A EP PATENT FILED  
UFFICIO BREVETTI RICCARDI & C.

19951229 EP/REG; GR/FG4A [+]  
GR: VALIDATION IN GREECE  
3017835  
<GR>

19960112 EP/ET [+]  
FR: TRANSLATION FILED

19960731 EP/REG; CH/PFA  
CH: NAME/FIRM CHANGED  
LEVEL 1 TECHNOLOGIES, INC. -DANN IN- SIMS LEVEL 1, INC.  
<CH>

19960828 EP/26N [+]  
NO OPPOSITION FILED

19961001 EP/NLT1  
NL: MODIFICATIONS OF NAMES REGISTERED IN VIRTUE OF DOCUMENTS  
PRESENTED TO THE PATENT OFFICE PURSUANT TO ART. 16 A, PARAGRAPH  
1(d) OF THE PATEN  
SIMS LEVEL 1, INC.



19961201 EP/REG; ES/PC2A [+]  
ES: TRANSFER GRANTED  
SIMS LEVEL 1, INC  
<ES>

19970110 EP/REG; FR/CA  
FR: CHANGE OF ADDRESS  
<FR>

19970110 EP/REG; FR/CD  
FR: CHANGE OF NAME OF NOMINATION  
<FR>

20020101 EP/REG; GB/IF02 [+]  
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01  
<GB>

UP - 2002-17

7 / 13 INPADOC - @INPADOC

PN - EP 247989 B1 19950906 [EP-247989]  
TI - SELF-CONTAINED PORTABLE UNIT FOR HEATING PHYSIOLOGICAL FLUIDS.  
LA - ENG  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - EP 87850176/87-A 19870526 [1987EP-0850176]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14  
DS - AT\* BE\* CH\* DE\* ES\* FR\* GB\* GR\* IT\* LI\* LU\* NL\* SE\*

1 / 3 LEGALI - @LEGSTAT

PN - DE 3751504 [DE3751504]  
DT - DE-P  
ACTE - 19951012 DE/REF-P  
CORRESPONDS TO  
(EP 247989 19951012 [EP-247989])

19960222 DE/8373  
TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED  
AND HAS BEEN PUBLISHED

19961002 DE/8364 [+]  
NO OPPOSITION DURING TERM OF OPPOSITION

19970814 DE/8327  
CHANGE IN THE PERSON/NAME/ADDRESS OF THE PATENT OWNER  
SIMS LEVEL 1, INC., ROCKLAND, MASS., US

UP - 1997-33

2 / 3 LEGALI - @LEGSTAT

PN - AT 127350 [ATE127350]  
DT - AT-R  
ACTE - 19950915 AT/REF-P  
CORRESPONDS TO EP-PATENT  
(EP 247989 19950906 [EP-247989])

19960415 AT/UEP [+]  
PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION

19961015 AT/EEFA  
CHANGE OF THE COMPANY NAME

UP - 1996-43

3 / 3 LEGALI - @LEGSTAT

PN - EP 247989 [EP-247989]  
AP - EP 87850176/87 19870526 [1987EP-0850176]  
DT - EP-P  
ACTE - 19870526 EP/AE-A  
EP-APPLICATION  
EP 87850176/87 19870526 [1987EP-0850176]

19871202 EP/AK-A2 [+]  
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH  
REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19871202 EP/A2 [+]  
PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT

19901122 EP/AK-A3 [+]  
DESIGNATED CONTRACTING STATES IN A SEARCH REPORT:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19901122 EP/A3 [+]  
SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93)

19910626 EP/17P [+]  
REQUEST FOR EXAMINATION FILED  
910429

19920902 EP/17Q [+]  
FIRST EXAMINATION REPORT  
920721

19950906 EP/AK-B1 [+]  
DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT  
SPECIFICATION:  
AT BE CH DE ES FR GB GR IT LI LU NL SE

19950906 EP/B1 [+]  
PATENT SPECIFICATION

19950906 EP/REF-R [+]  
IN AUSTRIA REGISTERED AS:  
(AT 127350 19950915 [ATE127350])

19951012 EP/REF-P  
CORRESPONDS TO:  
(DE 3751504 19951012 [DE3751504])

19951116 EP/REG; ES/FG2A  
ES: DEFINITIVE PROTECTION  
2076932T3  
<ES>

19951206 EP/ITF [+]  
IT: TRANSLATION FOR A EP PATENT FILED  
UFFICIO BREVETTI RICCARDI & C.

19951229 EP/REG; GR/FG4A [+]  
GR: VALIDATION IN GREECE  
3017835  
<GR>

19960112 EP/ET [+]  
FR: TRANSLATION FILED

19960731 EP/REG; CH/PFA  
CH: NAME/FIRM CHANGED  
LEVEL 1 TECHNOLOGIES, INC. -DANN IN- SIMS LEVEL 1, INC.  
<CH>

19960828 EP/26N [+]  
NO OPPOSITION FILED

19961001 EP/NLT1  
NL: MODIFICATIONS OF NAMES REGISTERED IN VIRTUE OF DOCUMENTS  
PRESENTED TO THE PATENT OFFICE PURSUANT TO ART. 16 A, PARAGRAPH  
1(d) OF THE PATEN  
SIMS LEVEL 1, INC.

19961201 EP/REG; ES/PC2A [+]  
ES: TRANSFER GRANTED  
SIMS LEVEL 1, INC  
<ES>

19970110 EP/REG; FR/CA  
FR: CHANGE OF ADDRESS  
<FR>

19970110 EP/REG; FR/CD  
FR: CHANGE OF NAME OF NOMINATION  
<FR>

20020101 EP/REG; GB/IF02 [+]  
GB: EUROPEAN PATENT IN FORCE AS OF 2002-01-01  
<GB>

UP - 2002-17

8 / 13 INPADOC - @INPADOC  
PN - ES 2076932 T3 19951116 [ES2076932]  
TI - UNIDADES PORTATILES AUTONOMAS PARA CALENTAR FLUIDOS FISIOLÓGICOS.  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC  
AP - ES 87850176/87-EP 19870526 [1987EP-0850176]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-001/00; A61M-001/36; A61M-005/14

1 / 1 LEGALI - @LEGSTAT  
PN - ES 2076932 [ES2076932]  
DT - ES-P  
ACTE - 19951116 ES/FG2A  
DEFINITIVE PROTECTION  
247989  
UP - 1997-10

9 / 13 INPADOC - @INPADOC  
PN - GR 3017835 T3 19960131 [GR3017835]  
TI - SELF-CONTAINED PORTABLE UNIT FOR HEATING PHYSIOLOGICAL FLUIDS.  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - GR 402932/95-A 19951024 [1995GR-0402932]  
PR - US 866910/86-A 19860527 [1986US-0866910]

IC - A61M-001/00; A61M-001/36; A61M-005/14

10 / 13 INPADOC - ©INPADOC

PN - JP 63019156 A2 19880126 [JP63019156]  
TI - AUTOMATIC FEED TYPE LIQUID ADMINISTRATION APPARATUS  
IN - UESURII EICHI BAAKAAATO  
PA - REBERU WAN TEKUNOROJIZU INC  
AP - JP 129570/87-A 19870526 [1987JP-0129570]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-005/16

11 / 13 INPADOC - ©INPADOC

PN - JP 8004626 B4 19960124 [JP96004626]  
AP - JP 129570/87-A 19870526 [1987JP-0129570]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61M-005/44; A61M-005/168

12 / 13 INPADOC - ©INPADOC

PN - US 4759749 A 19880726 [US4759749]  
TI - HEATER FOR PHYSIOLOGICAL FLUIDS  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES INC [US]  
AP - US 866910/86-A 19860527 [1986US-0866910]  
PR - US 866910/86-A 19860527 [1986US-0866910]  
IC - A61F-007/12; H05B-001/00

1 / 1 LEGALI - ©LEGSTAT

PN - US 4759749 [US4759749]  
AP - US 866910/86 19860527 [1986US-0866910]  
DT - US-P  
ACTE - 19860527 US/AE-A  
APPLICATION DATA (PATENT)  
US 866910/86 19860527 [1986US-0866910]

19860703 US/AS02  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
LEVEL 1 TECHNOLOGIES, INC., 29 ALDRIN ROAD, PLYMOUTH, MA., 02360  
\* VERKAART, WESLEY H. : 19860527

19880726 US/A  
PATENT

19901002 US/RF  
REISSUE APPLICATION FILED  
900726

19930223 US/RF  
REISSUE APPLICATION FILED  
921120

19950321 US/RF  
REISSUE APPLICATION FILED  
931103

19960326 US/RF  
REISSUE APPLICATION FILED  
951206

19960522 US/AS01

CHANGE OF NAME  
SIMS LEVEL 1, INC. 160 WEYMOUTH STREET ROCKLAND, MASSACHUSETTS  
02370 \* LEVEL 1 TECHNOLOGIES, INC. : 19951017

19970805 US/RF  
REISSUE APPLICATION FILED  
961202

20020820 US/RF  
REISSUE APPLICATION FILED  
20020102

UP - 2002-35

13 / 13 INPADOC - @INPADOC  
PN - US 4878537 A 19891107 [US4878537]  
TI - HEAT EXCHANGER FOR PHYSIOLOGICAL FLUIDS  
IN - VERKAART WESLEY H [US]  
PA - LEVEL 1 TECHNOLOGIES [US]  
AP - US 53637/87-A 19870526 [1987US-0053637]  
PR - US 866910/86-A2 19860527 [1986US-0866910]  
IC - A61F-007/12

1 / 1 LEGALI - @LEGSTAT  
PN - US 4878537 [US4878537]  
AP - US 53637/87 19870526 [1987US-0053637]  
DT - US-P  
ACTE - 19870526 US/AE-A  
APPLICATION DATA (PATENT)  
US 53637/87 19870526 [1987US-0053637]

19880617 US/AS02  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
LEVEL 1 TECHNOLOGIES, INC., 29 ALDRIN ROAD, PLYMOUTH, MA 02360 \*  
VERKAART, WESLEY H. : 19870522

19891107 US/A  
PATENT

19960522 US/AS01  
CHANGE OF NAME  
SIMS LEVEL 1, INC. 160 WEYMOUTH STREET ROCKLAND, MASSACHUSETTS  
02370 \* LEVEL 1 TECHNOLOGIES, INC. : 19951017

UP - 1999-22

Session finished: 30 SEP 2002 Time 17:17:17